



# ESS Module Datasheet

## LTO ENERGY STORAGE MODULE

### TECHNICAL DATA SHEET

Chemistry		Lithium Titrate Oxide (LTO)
Model No.		48V80A
ENERGY	Total Energy	4.782 kWh
PERFORMANCE	Voltage (Nominal) DC	48
	Maximum Charge Voltage	58.8
	Discharge Cut-Off Voltage	31.5
	Continuous Discharge Current.	6 C
	Continuous Charge Current	6 C
	Maximum Charge Current	10C
	Maximum Discharge	10 C
	Self-Discharge Rate	1-3% per month*
	Maximum Depth of Discharge	100%
	Recommended Depth of Discharge	80%
	Dimensions (w × d × h) mm	
PHYSICAL SPECS	Weight	App. 48 kgs
	Module Casing Material	Steel
	Power Terminal Type	Through Type Terminals
	Monitoring Data	String Voltage, Cell Voltage, Current, Temperatures
SAFETY	Alarm	Under/over Voltage, Over Current, over Temperature
	Module Monitoring	Current, Voltage, Temperatures and SOC
	Over/under voltage	Unit shut down
	Over Current	Unit shut down
	Over temperature	Unit shut down
	Short Circuit/Over Current	Solid State Protection
ENVIRONMENT	Humidity	<90% non-condensing / <70% storage
	Cell Operating Temperature	-20 <sup>0</sup> ~+55 °C
	Storage Temperature	-5°C~28°C
Expected Life	Cycles at operating temp. 0-25 deg. C; EoL Cap. 80%	>30,000 cycles @1.0C; >20,000 cycles @6.0C
Efficiency		Energy Efficiency 95%
Connectivity	Communication	CAN

\*2.5% @25<sup>0</sup>c and 4% @40<sup>0</sup>C Note: Specifications may change without notice